Clear Form

Michigan Department of Transportation 5100B (02/06)

CHECKLIST TO DESIGNATE AREAS OF EVALUATION FOR REQUESTS FOR PROPOSAL (RFP)

Exhibit B

PROJECT MANAGER	JOB NUMBER (JN)	CONTROL SECTION (CS)
Pete Wessel	87327	Various

DESCRIPTION IF NO JN/CS

Underwater Inspection at 20 Bridges and Culverts throughout the Superior Region

MDOT PROJECT MANAGER: Check all items to be included in RFP.

WHITE = REQUIRED
GRAY SHADING = OPTIONAL

Check the appropriate Tier in the box below

CONSULTANT: Provide only checked items below in proposal.

☐ **TIER I ($25,000-$99,999)**	☐ **TIER II ($100,000-$250,000)**	☐ **TIER III (>$250,000)**	
☐	☐	☐	Understanding of Service
☐	☐	☐	*Innovations*
☐	☐	☐	*Safety Program*
N/A	☐	☐	Organization Chart
☑	☐	☐	Qualifications of Team
☑	☐	☐	Past Performance
Not required as part of official RFP	Not required as part of official RFP	☐	Quality Assurance/Quality Control
☐	☐	☐	Location of Service Personnel **(Only check for on-site inspection services)**
N/A	N/A	☐	Presentation
N/A	N/A	☐	Technical Proposal (if Presentation is required)
3 pages including cover sheet **(No Resumes)**	7 pages	19 pages	Total maximum pages for RFP **not including key personnel resumes**

BUREAU OF HIGHWAYS
REQUEST FOR PROPOSAL
for
QUALIFICATIONS BASED SELECTION FOR PREQUALIFIED SERVICES

The Michigan Department of Transportation (MDOT) is seeking professional services for the project contained in the attached scope of services.

If your firm is currently prequalified for this type of work and you are interested in providing services, please indicate your interest by submitting a Proposal. The Proposal must be submitted in accordance with the latest "Vendor Selection Guidelines for Service Contracts", available on the MDOT website.

For efficiency sake, we are asking that the vendor firm provide [4] paper copies of the Proposal to the MDOT project manager named in the attached scope of services.

These copies must be received by **May 5, 2006.** Fax and electronic copies are not acceptable.

In addition, provide one unbound copy to:

Regular Mail:
Secretary, Operations Contract Support
Michigan Department of Transportation
P.O. Box 30050
Lansing, MI 48909

OR

Overnight Mail:
Secretary, Operations Contract Support
Michigan Department of Transportation
425 W. Ottawa
Lansing, MI 48933

This copy is to be received within three working days after the due date and time specified above. Please do not deliver in person.

Any questions relative to the scope of services must be submitted by e-mail to the MDOT project manager. Any questions must be asked at least three working days prior to the due date and time specified above. All questions and their answers will be placed on the MDOT website as soon as possible after receipt of the questions. The names of vendors submitting questions will not be disclosed.

For a cost plus fixed fee contract, the selected vendor must have a cost accounting system to support a cost plus fixed fee contract. This type of system has a job-order cost accounting system for the recording and accumulation of costs incurred under its contracts. Each project is assigned a job

number so that costs may be segregated and accumulated in the vendor's job-order accounting system.

The selection team will review the information submitted and will select the firm considered most qualified to perform the engineering services based on the proposals. The selected vendor will be contacted to confirm capacity. Upon confirmation, that firm will be asked to prepare a priced proposal. Negotiations will be conducted with the firm selected.

The maximum allowable pages for the proposal are limited to the selected Tier shown on MDOT Form 5100B, which is posted with this RFP. Page limits apply to the entire proposal. The number of pages per section is the decision of the creator of the proposal. Include in proposal only those items that are checked by the MDOT project manager on form 5100B.

MDOT is an equal opportunity employer and MDOT DBE firms are encouraged to apply. The participating DBE firm, as currently certified by MDOT's Office of Equal Opportunity, shall be listed in the Proposal.

The scope of services is attached to this solicitation.

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY TECHNICAL SERVICES

SCOPE OF SERVICES
for
UNDERWATER BRIDGE INSPECTION

April 3, 2006

CONTROL SECTION: Various
JOB NUMBER: 87327

DESCRIPTION OF WORK: The Bridge Management Section of the Superior Region of the Michigan Department of Transportation (MDOT) is seeking a proposal from a prequalified diving inspection firm (CONSULTANT) to perform in-service safety inspections of submerged substructure elements on bridges and culverts located on state trunkline roads in accordance with National Bridge Inspection Standards (NBIS). This is termed "diver inspection".

I. Primary Prequalification Classification: Underwater Bridge Inspection
II. Secondary Prequalification Classification: None Required

DBE Requirement: 0%.
The anticipated start date of the service is **June 12, 2006**.
The anticipated completion date for the service is **October 1, 2006**.

MDOT Project Manager

Peter W. Wessel, P.E.
Superior Region Office
1818 3rd Ave North
Escanaba, MI 49829

(906) 786-1830 ext. 318
(906) 789-9775 Fax
wesselp@michigan.gov

III. LOCATION

The bridges for this project are situated regionwide. See page 11, the "LOCATION MAP" for location of the structures, and pages 12 and 13 for the "DIVER INSPECTION WORK PACKAGE LIST" for specific bridge numbers.

IV. PURPOSE

In accordance with the National Bridge Inspection Standards (NBIS), each bridge under MDOT jurisdiction, which has submerged substructure elements that cannot be checked by wading, must be inspected by a qualified diver on a periodic basis. The bridges identified on the DIVER INSPECTION WORK PACKAGE LIST (attached) will be inspected to meet this requirement and as specified herein.

The deliverable for this authorization will be the "Inspection Report." This report will have several components as noted below and will be reviewed and attested to be accurate and complete under seal of a Professional Engineer.

V. DURATION & SCHEDULE

A. Schedule of Date and Milestones

The CONSULTANT must develop a schedule to perform the inspections of the bridges as shown on the DIVER INSPECTION WORK PACKAGE LIST and submit it to the MDOT PM for approval. The CONSULTANT must be prepared to begin work within three working days of receiving Notice to Proceed (NTP). Any changes to the schedule must be submitted to the MDOT PM for approval prior to the change. Failure to progress in alignment with the schedule will be considered as failing to meet the terms of the contract and may result in the cancellation of the contract.

B. Meetings

The Diving Inspector and the Engineer must attend a pre-inspection meeting and a project closeout meeting. Both meetings will be held in the Superior Region at a location and time mutually agreed upon. The expected dates for these meetings are shown below, however they may be adjusted as mutually agreed to by both MDOT PM and the CONSULTANT.

1. Pre-inspection Meeting

   The purpose of the Pre-inspection meeting is to cover the operational aspects of the inspection process with the MDOT PM and other MDOT personnel, deliver and review the inspection schedule, exchange telephone numbers, reinforce safety issues, verify MDOT Right of Way permit, establish procedures for communicating with MDOT if a situation is encountered that needs immediate MDOT attention, and answer any questions that the inspector or engineer may have.

   The anticipated date for this meeting is June 12, 2006.

2. Project Closeout Meeting

   The purpose of the Project Closeout meeting is to submit the Inspection Reports and review them with the MDOT PM. The MDOT PM will also provide feedback to the CONSULTANT on the overall performance of the contract.

   The anticipated date for this meeting is October 1, 2006.

VI. STAFF QUALIFICATION REQUIREMENTS

The CONSULTANT must provide personnel with qualifications that meet or exceed the requirements below. One individual may act in different capacities at different times; however, they must meet the qualifications of both jobs.

A. DIVER INSPECTION TEAM COMPOSITION

Each bridge will be inspected by a diving team composed of a minimum of three (3) people composed of an Engineer, Diver(s), and Tender(s). The diving operations must be in conformance with Michigan Occupational Safety and Health Administration regulations (MIOSHA) and the Diving Operations and Occupational Safety and Health Administration regulations (OSHA) Subpart N, Commercial Diving Standards. The CONSULTANT will assign the Designated Person In Charge of Diving Operations in writing prior to starting the diving operations. The Engineer may also serve as one of the team members if properly certified.

B. INSPECTION ENGINEER QUALIFICATIONS

The Inspection Engineer must have 3 years of experience in the inspection of underwater structures. They must have knowledge of NBIS inspection requirements and FHWA publications for foundation scour (HEC No's. 18 & 20).

They must be a Registered Professional Engineer in the state of Michigan. The Inspection Engineer must be on site during the diving operations.

C. DIVER QUALIFICATIONS

The Diver Inspector(s) must be certified by a national recognized authority, such as the Professional Association of Diving Instructors (PADI) or Association of Commercial Diving Educators (ACDE) in the type of diving equipment that will be used for the inspections. They must be in sound physical condition and have proof of a medical physical examination within the last twelve (12) months on file with the company.

The Diver Inspector(s) must have a minimum of three (3) years of structural inspection experience with bridge and like structures **AND** recently completed the NHI course #130055A, Safety Inspection of In-Service Bridges or a similar FHWA-approved two-week comprehensive bridge inspection class. This experience must be actual performance of the work and not supervision or ancillary activities.

The Diver Inspector(s) must possess good verbal communication skills and be able to write and sketch the observations found during the inspection.

D. DIVER TENDER QUALIFICATIONS

The Diver Tender(s) must have two (2) years of experience in assisting diver operations. This must be actual performance of the work and not supervision or ancillary activities.

VII. GENERAL DESCRIPTION OF THE WORK

The work associated with this project is broken into two phases: Site inspection and data gathering, and the completion of the report writing and communication of the information to MDOT. Both phases must be completed for successful completion of the project.

A. SITE INSPECTION

Briefly stated, the Diver Inspection Team will go to the bridge site, enter the water with underwater breathing equipment, and complete a visual/tactile inspection (Level I as defined in the Bridge Inspector's Reference Manual) for the condition of the structure under the waters surface and just above it. This inspection will be done according to NBIS and will include a topographical examination of the streambed in and around the substructure elements and probing along the mud line for support. The Diver Inspection Team will record their observations in narrative form as well as with sketches and pictures as is appropriate.

Prior to commencing diving operations, the Diver Inspection Team will evaluate and make notes on the waterway such as bank erosion or evidence of waterway movement, debris buildup, and obstructions which may adversely affect the bridge. Any deficiencies visually observed on substructure elements above the water will be noted in the report.

Timber dolphin and fender systems on or near the bridge or in the waterway for the protection of the bridge will be inspected. The structural condition of the elements will be determined and they will be evaluated to determine if they meet the latest FHWA clearance requirements.

The elevation of the river bed relative to an established datum must be measured for all structures over water. These measurements must be taken at the previous locations along the length of the bridge that is over the water and recorded on the "Stream Cross Section Report" form (See Worksheet Instructions). This information must be compared to the previous data in the form of a graph. The form is set up to automatically graph the new data with the old for comparison. With the approval of the MDOT PM, the CONSULTANT may contact **Kristin Schuster, P.E., Engineer-Manager** of the MDOT Hydraulics Unit in Design for additional information.

Problems, which could affect the continued safe operation of the bridge, must be brought to the attention of the MDOT PM before the Diver Inspection Team leaves

the site.

B. REPORT

The Diver Inspection Team will take the information and data obtained in the field and assemble it into a report for delivery to MDOT. The report will contain a written description of the conditions found at the site, above and below water as may be applicable, and contain a statement as to the condition of the substructure elements (i.e. good, fair, poor), identify all deleterious conditions and an estimate of the magnitude of each, and provide photographs and sketches of the substructure element and the effected areas. A recommended NBIS rating number must also be provided for the Substructure Elements (Item 60), Channel and Channel Protection (Item 61), Pier Protection (Item 111), and Scour Critical Bridges (Item 113). *The rating for Item 113 will be based on the "observed" scour condition; scour calculations are **not** part of this contract.*

The report will be review by a Professional Engineer registered in the State of Michigan for compliance with the NBIS and for the thoroughness of the inspection. The report will be signed and sealed attesting to this review.

The report will contain a number of standard observations/measurements as follows:

1. Date and time of inspection.
2. Bridge Number.
3. Location and name of waterway.
4. Water Temperature.
5. Current Water.
6. Depth Turbidity.
7. Type of material on the stream bed.
8. Presence and condition of rip-rap or scour countermeasures.
9. Extent of marine growth on substructure elements.
10. Engineer's Name.
11. Diver Inspector's Name.
12. Tender's Name.
13. Type of diving equipment used.

The CONSULTANT will submit to the MDOT PM a sample one-page report form listing the standard observations/measurements for a review of the content and format. This form will be used as the cover sheet for all of the bridge reports and attached to it will be the supplemental information such as sketches, photographs, additional narrative, riverbed profile forms, etc. Riverbed profile measurements will be included with each report and on the standardized forms provided.

The CONSULTANT will submit two 3-ring bound final reports for each structure. The report will also contain one Compact Disk per structure with electronic copies of the final report.

C. EQUIPMENT

The CONSULTANT will be responsible for providing all equipment necessary to complete the project in an efficient and safe manner. The CONSULTANT will be responsible for selecting the type of dive equipment (SCUBA, surface-supplied air, or mixed gas) that will best be suited for the work at a given site and is required to have all of the typical forms of commercial diving equipment available for the project. The boat or marine vessel used for the project must have room to accommodate the MDOT PM.

The CONSULTANT must provide all of the necessary inspection tools for completion of the inspection. Typical items such as cameras, hammers, lights, message boards, and scrapers can be expected.

The CONSULTANT must provide all of the necessary personal safety equipment for each employee at the work site.

All equipment must be in sound working order, meeting applicable inspections for safe operation. Lost time due to equipment failures will not be paid for.

D. SAFETY

MDOT requires safe working operations. The CONSULTANT and its employees must be trained in all the applicable state and federal regulations as well as industry practices for the work being performed. It is not the responsibility of MDOT to verify the CONSULTANT's safety practices; however, the MDOT PM has the authority to have any individual who is found working unsafely removed from MDOT right of way. If the CONSULTANT is found to be working unsafely, the MDOT PM can stop all operations and terminate the contract.

The CONSULTANT will be responsible for coordination with United States Coast Guard for diving operations located in designated Navigable Waters.

Some, but not all, of the regulations that can be expected to apply are the latest revisions of:

1. Michigan Occupational Safety and Health Administration regulations (MIOSHA) Part 79 & Part 504, Diving Operations.
2. Occupational Safety and Health Administration regulations (OSHA) Subpart N, Commercial Diving Standards.
3. Marine Occupational Safety and Health Standards (USCG Regulations), 46 CFR 197.200-197.488 plus Appendix A, Subchapter V.
4. Consensus Standards for Commercial Diving Operations, Association of Diving Contractors, latest edition (ADC Standards)

VIII. VENDOR PAYMENT

All invoices/bills for services must be directed to the Department and follow the 'then current' guidelines. The latest copy of the "Professional Engineering Service Reimbursement Guidelines for Bureau of Highways" is available on MDOT's Bulletin Board System. This document contains instructions and forms that must be followed and used for invoicing/billing; payment may be delayed or decreased if the instructions are not followed.

Payment to the Vendor for Services rendered shall not exceed the "Cost Plus Fixed Fee Not to Exceed Maximum Amount" unless an increase is approved in accordance with the contract with the Vendor. All invoices/bills must be submitted within 14 calendar days of the last date of services being performed for that invoice.

Direct expenses will not be paid in excess of that allowed by the Department for its own employees. Supporting documentation must be submitted, with the invoice/bill, for all billable expenses on the Project. The only hours that will be considered allowable charges for this contract are those that are directly attributable to the CE activities of this Project. Hours spent in administrative, clerical, or accounting roles for billing and support, are not considered allowable hours; there will be no reimbursement for these hours.

The use of overtime hours is not acceptable unless prior written approval is granted by the MDOT Region Engineer and the MDOT Project Engineer Manager. Reimbursement for overtime hours that are allowed will be limited to time spent on this project in excess of forty hours per person per week. Any variations to this rule should be included in the price proposal submitted by the vendor and must have prior approval by the MDOT Project Engineer Manager.

IX. GENERAL

A. RELEASE OF INFORMATION

The CONSULTANT may not release any information about the bridge or the Inspection to anyone outside of MDOT.

The CONSULTANT is not allowed to make copies of the information in the bridge files unless given written approval from the MDOT PM.

B. REFERENCES

The CONSULTANT is to have the following reference material and be familiar with their contents.

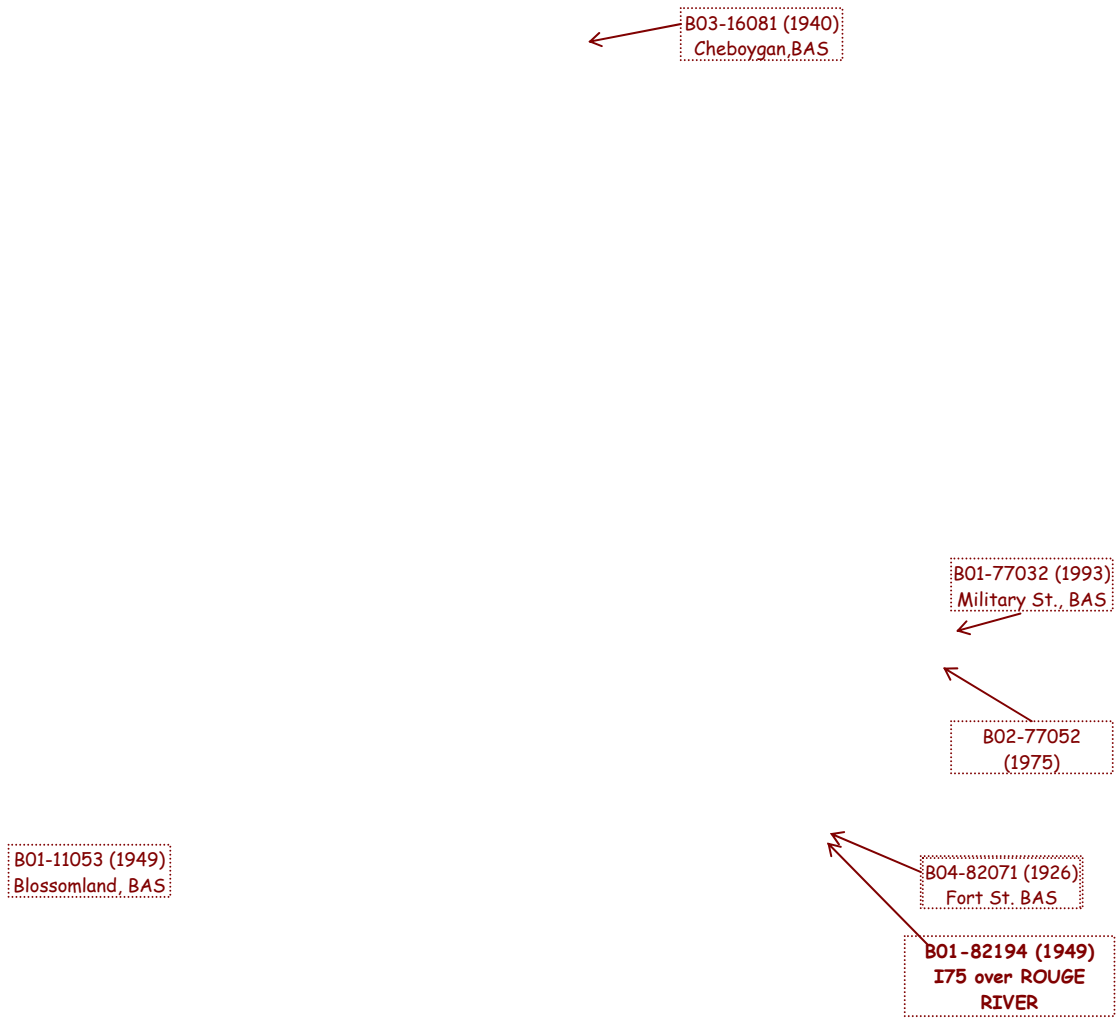
1. National Bridge Inspection Standards (NBIS).

2. AASHTO Manual for Condition Evaluation of Bridges, 1994, and subsequent interim changes or the most recent version.

3. FHWA Publications:

   a. “Bridge Inspector’s Reference Manual”, October, 2002, FHWA NHI 03-001.
   b. “Culvert Inspection Manual”, Report No. FHWA-IP-86-2.
   c. “Inspection of Fracture Critical Bridge Members”, Report No. FHWA-IP-86-26.
   d. “Recording and Coding Guide for the Structure Inventory and Appraisal of Nation’s Bridges”, Report No. FHWA-PD-96-001, December, 95.
   e. “Underwater Inspection of Bridges”, Report No. FHWA-DP-80, November, 1989.

Map


B03-16081 (1940)
Cheboygan,BAS
B01-77032 (1993)
Military St., BAS
B02-77052
(1975)
B01-11053 (1949)
Blossomland, BAS
B04-82071 (1926)
Fort St. BAS
B01-82194 (1949)
I75 over ROUGE
RIVER

DIVER INSPECTION WORK PACKAGE LIST

	BRIDGE NUMBER	LOCATION	STRUCTURE TYPE	PREVIOUS INSPECTION DATE	COMMENTS
1	B01-07041	M-38 over the Sturgeon River, 6.6 mi. W of Baraga	3-Span, Steel	July 11, 2001	Inspect 1 Pier
2	B02-17011	M-123 over the Tahquamenon River, 4.8 mi. S of Paradise	5-Span, Steel	July 16, 2001	Inspect 4 Piers
3	C01-17043	M-48 over the E Br Munuscong River, 7.6 mi. NW of Goetzville	2-72” CMP	July 17, 2001	Submerged in 2001, partially in 2004
4	C01-21024	US-2 over Br Ogontz River, 0.5 mi. W of St. Jaques	1-Span, Conc Box	July 4, 2001	Submerged in 2001, partially in 2005
5	C02-21024	US-2 over Little Fishdam River, 1.5 mi. W of Schoolcraft Co. Line	1-Span, Conc Box	July 3, 2001	19” freeboard in 2005
6	B01-22011	M-95 over Menominee River, at Wisconsin State Line (Kingsford)	5-Span, PCI	July 7, 2001	Inspect 2 Piers
7	B01-22031	US-141 over Menominee R. at Wisconsin St Line (Niagara, WI)	6-Span, Steel	June 12, 2001	Inspect 5 Piers and Scour Countermeasures
8	B02-22051	US-8 over Menominee R. at Wisconsin St Line (S of Norway)	3-Span, Steel	June 13, 2001	Inspect 2 Piers
9	B02-31051	US-41 over Backwater Portage, 2.7 mi. SE of Chassell	2-Span, Conc Box	July 10, 2001	Scour Countermeasures Installed in 2002
10	B03-31051	US-41 over Sturgeon River Slough, 2.3 mi. SE of Chassell	3-Span, Steel	July 9, 2001	Inspect 2 Piers
11	B04-31051	US-41 over the Sturgeon River, 1.8 mi. SE of Chassell	4-Span, Steel	July 11, 2001	Inspect 3 Piers
12	C01-31051	US-41 over Jarvi Creek, 2.1 mi. N of Baraga County Line	1-Span, Conc Box		15” freeboard in 2005
13	C02-31051	US-41 over Marsh Drain, 2.9 mi. SE of Chassell	Conc Box/Pipe	July 9, 2001	Twin 8’ Box, Extended with 3-36” Conc. Pipes, Each End

DIVER INSPECTION WORK PACKAGE LIST (continued)

	BRIDGE NUMBER	LOCATION	STRUCTURE TYPE	PREVIOUS INSPECTION DATE	COMMENTS
14	B01-49041	M-134 over the Pine River, 1.0 mi. E of I-75	3-Span, Steel	July 17, 2001	
15	C01-52031	M-35 over Sawmill Creek, 4.1 mi. SE of Little Lake	1-14' CMP	July 14, 2001	Mostly Submerged 2005
16	B03-52032	M-35 over the Middle Br. of the Escanaba River, 6.2 mi. W of Gwinn	2-Span, PS Box		Inspect 1 Pier
17	B01-55031	M-35 over the Big Cedar River, 0.2 mi. NE of Cedar River	5-Span, Steel	July 5, 2001	Inspect 4 Piers
18	C02-66012	M-64 over Anderson Creek, 8.9 mi. N of M-28	2-Span, Conc Box		1" freeboard at W end, 24"freeboard at E end
19	B03-66061	M-107 over the Big Iron River, @ M-64	2-Span, Steel	July 8, 2001	
20	B01-75021	US-2 over the Manistique River, in Manistique	5-Span, Steel	July 3, 2001	Inspect Piers 1 and 4